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ABSTRACT

Comparison studies were made of the academic progress of junior college transfers, four-year college transfers, and continuous juniors (natives) at the University of Illinois, as measured by mean GPA, academic status, and continued enrollment through the two years after transfer; of the performance after transfer with that before transfer on the basis of mean GPA; and of junior college transfers, four-year college transfers, and continuous juniors in 12 subject matter areas on the basis of mean GPA during the 1971-72 and 1972-73 academic years. The data resulting from the studies led to the following conclusions: (1) junior college transfers and four-year college transfers enter with pretransfer GPA's approximately equivalent to the lower division university GPA's of native juniors; (2) junior college transfers experience a first semester drop of about .40 in GPA below their pretransfer GPA and the four-year college transfers and natives; however, this loss in GPA is regained by the end of the fourth semester; (3) retention of junior college and four-year college transfer groups is approximately equal for the first semester at .94 and .95, respectively; (4) junior college transfers experience more academic difficulty after transfer than do four-year college transfers or natives, as measured by probation and drop rates; (5) the junior college transfer group performed at the "B" level during the fourth semester at the university; (6) native juniors and four-year college transfers achieve equivalent group GPA's; (7) native juniors have higher retention rates than do four-year or junior college transfers; (8) transfer students have higher academic probation and drop rates than native juniors, and junior college transfers have higher probation and drop rates than do four-year college transfers; and (9) junior college transfers consistently achieve at a lower GPA than the other two groups in the 12 subject areas studied; natives and four-year transfers perform about equally. (DB)

**Comparison of Transfer and Native Student Progress
at the University of Illinois at Urbana-Champaign
Fall, 1971 Group**

by

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**University Office of School and College Relations
Research Memorandum 74-9
University of Illinois
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**COMPARISON OF TRANSFER AND NATIVE STUDENT PROGRESS
AT THE UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
FALL 1971 GROUP**

Purpose

The purpose of this study is to compare the academic progress of junior college transfers, four-year college transfers, and continuous juniors (natives) at the University of Illinois at Urbana-Champaign as measured by mean grade-point average (G.P. A.), academic status, and continued enrollment through the two years after transfer. A secondary purpose is to compare the performance after transfer with performance before transfer on the basis of mean grade-point average. In addition, junior college transfers, four-year college transfers, and continuous juniors are compared in twelve subject matter areas on the basis of mean grade-point average during the 1971-72 and 1972-73 academic years.

Method

Three groups of students are included in this study. Junior college transfers include all of the new and readmitted students to the University of Illinois at Urbana-Champaign for the 1971 fall term who had completed 12 or more semester credit hours before transfer and whose institution of last attendance was a community or junior college. Four-year college transfers include all new and readmitted transfer students who had completed 12 or more semester equivalent hours of transfer credit and whose institution of last attendance before transfer was a four-year college or university. The native students include all 1971

fall term continuing juniors who entered as beginning freshmen at the University of Illinois at Urbana-Champaign and had completed more than 60 and less than 90 semester hours of college credit while in continuous enrollment at the University of Illinois at Urbana-Champaign. Junior college and four-year college transfer groups include students with less than 60 semester hours and may include a few students with more than 90 semester credit hours. The groups include 455 junior college transfers, 679 four-year college transfers, and 4,238 continuous juniors (natives) which is the total population of students in each of the three groups.

This study does not attempt to account for differences in academic performance related to variance in pre-admission academic and nonacademic variables among the three groups of students studied. In a recent study of achievement by transfer and native students at the Urbana-Champaign campus, Wermers¹ found

" . . . that junior college transfer students rank lower than four-year transfer students and natives on ACT, HSPR, and SES. Junior college transfer students also scored lower than the four-year groups on standard scores achieved on the CLEP General Examinations, the common criteria of achievement. Differences between natives and four-year transfers on ACT, HSPR, SES and CLEP scores were not as clear.

"Differences on mean CLEP scores among the groups diminished when the control variables were applied in the analysis of covariance technique. . . . The results of this study seem to indicate that, generally, students who completed lower division requirements in junior colleges and then transferred to the University of Illinois progressed academically during the first two years of college at a pace equivalent to students who completed lower division requirements in four-year institutions."

[Note: ACT (American College Test); HSPR (High School Percentile Rank); SES (Socioeconomic Status); CLEP (College Level Examination Program)].

¹Donald J. Wermers, Summary of "Achievement by Junior College Transfer, Four-Year College Transfer, and Native Juniors as Measured by the CLEP General Examinations," University Office of School and College Relations, University of Illinois at Urbana-Champaign, Research Memorandum 72-5, March, 1972.

Since differences in characteristics of the students transferring from each of the three types of colleges are not accounted for in this study, it is inadequate to serve as a basis for inferences concerning the independent effects of type of institution attended on academic achievement and success after transfer. Neither do the controls justify inferences about the independent effect of a specific junior or four-year college on the academic performance of transfers from that institution. The study simply reports the academic progress and success of the three groups without accounting for the source of any variance which occurs among the groups.

First Semester Success

Table 1 presents a summary of transfer and native student progress for the three groups of students included in the study during the four-semester period from fall 1971 through spring 1973. The junior college group of 455 transfers entered in the fall of 1971 with a pre-transfer grade-point average of 3.99 (C = 3.0). The junior college group achieved a 3.57 mean first term G.P.A. which is .42 less than the same students achieved before entering the university. This drop in G.P.A. is similar to the .39 decrease found for the 1970 junior college group² and the .37 for the 1969 group.³ A total of 679 four-year college transfers


²Ernest F. Anderson, "Comparison of Transfer and Native Student Progress at the University of Illinois at Urbana-Champaign," 1970-71 Academic Year, University Office of School and College Relations, University of Illinois at Urbana-Champaign, Research Memorandum 72-2, January, 1972.

³Ernest F. Anderson, "Summary of Transfer Student Progress at the University of Illinois at Urbana-Champaign," Fall 1968 and 1969 Transfers, University Office of School and College Relations, University of Illinois, Research Memorandum 70-24, December, 1970.

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TABLE I

**Summary of Transfer and Native Student Progress
University of Illinois at Urbana-Champaign
Fall 1971 Groups**

 Semester (1)	Junior College (2)	Four-Year College (3)	Continuous Native Juniors (4)
Fall 1971 Semester			
Number of Transfers	455	679	4238
Mean Transfer GPA	3.99	4.02	3.94
Mean First Term GPA	3.57	4.01	3.99
Change in Mean GPA	-.42	-.01	+.05
Status:			
Graduated	1 (*%)	10 (1%)	1 (*%)
Clear	338 (75%)	588 (87%)	3870 (92%)
Probation	87 (19%)	50 (7%)	225 (5%)
Dropped	16 (3%)	7 (1%)	56 (1%)
Withdrew	13 (3%)	24 (4%)	86 (2%)
Retention Ratio**	426 (.94)	648 (.95)	4096 (.97)
Spring 1972 Semester			
Number of Transfers Re-enrolled	406	609	4012
Mean Transfer GPA	4.03	4.03	3.99
Mean Second Term GPA	3.76	4.08	4.10
Change in Mean GPA	-.27	+.05	+.11
Increase in GPA Over First Term	+.19	+.07	+.11
Status:			
Graduated	1 (*%)	41 (6%)	163 (4%)
Clear	331 (82%)	516 (85%)	3617 (91%)
Probation	44 (11%)	30 (5%)	123 (3%)
Dropped	18 (4%)	10 (2%)	58 (1%)
Withdrew	12 (3%)	12 (2%)	51 (1%)
Retention Ratio**	377 (.83)	597 (.88)	3904 (.92)

*Less than one percent.

**Retention Ratio: The proportion of the total Fall 1971 Group which has been graduated or completed the term on clear or probationary status.

TABLE I (Continued)

Summary of Transfer and Native Student Progress
University of Illinois at Urbana-Champaign
Fall 1971 Groups

Semester (1)	Junior College (2)		Four-Year Colleges (3)		Continuous Native Juniors (4)	
<u>Fall 1972 Semester</u>						
Number of Transfers Re-enrolled	360		499		3605	
Mean Pre-Transfer GPA	4.02		4.05		4.03	
Mean Third Term GPA	3.85		4.12		4.18	
Change in Mean GPA	-.17		+.07		+.15	
Increase in GPA Over 2nd Term	+.09		+.04		+.08	
Status:						
Graduated	7	(2%)	42	(8%)	421	(12%)
Clear	303	(84%)	433	(87%)	3028	(84%)
Probation	31	(9%)	13	(3%)	81	(2%)
Dropped	12	(3%)	5	(1%)	30	(1%)
Withdrew	7	(2%)	6	(1%)	45	(1%)
Retention Ratio**	343	(.75)	539	(.79)	3694	(.87)
<u>Spring 1973 Semester</u>						
Number of Transfers Re-enrolled	345		469		3222	
Mean Pre-Transfer GPA	4.03		4.04		4.04	
Mean Fourth Term GPA	4.03		4.19		4.18	
Change in Mean GPA	0		+.15		+.14	
Increase in GPA Over 3rd Term	+.18		+.07		0	
Status:						
Graduated	195	(56%)	304	(65%)	2699	(84%)
Clear	125	(36%)	148	(32%)	438	(14%)
Probation	9	(3%)	6	(1%)	39	(1%)
Dropped	6	(2%)	9	(2%)	27	(1%)
Withdrew	10	(3%)	2	(*)	19	(*)
Retention Ratio**	338	(.74)	545	(.80)	3761	(.89)
<u>Summary (End of 4th Semester)</u>						
Graduated	203	(45%)	391	(58%)	3284	(78%)*
Clear (continuing)	125	(27%)	148	(22%)	438	(10%)
Pro (continuing)	9	(2%)	6	(1%)	39	(1%)
Dropped	34	(7%)	17	(2%)	171	(4%)
Withdrew	35	(8%)	38	(5%)	201	(5%)
Left on clear	30	(7%)	74	(11%)	N/A	
Left on pro	16	(4%)	5	(1%)	N/A	

*Less than one percent.

**Retention Ratio: The proportion of the total Fall 1971 Group which has been graduated or completed the term on clear or probationary status.

***A few students who have graduated in a previous term and re-enrolled are counted more than once in this category.

entered with a pre-transfer grade-point average of 4.02 and achieved a mean first term grade-point average of 4.01. The 4,238 continuous juniors achieved a 3.94 grade-point average during the first two years at the University of Illinois. This native group achieved a 3.99 grade-point average during the first term of the junior year, which is very similar to the G.P.A. achieved by native juniors in previous years.

Data presented in Columns 2, 3, and 4 of Table 1 indicate that the junior college and four-year college transfer groups entered with similar grade-point averages (3.99 and 4.02), but the four-year college transfers achieved a higher grade-point average during the first term after transfer than the junior college transfers (4.01 vs. 3.57). Continuous juniors during their first two years at the University achieved a grade-point average of 3.94 and their first term junior year performance of 3.99 is slightly higher than their average for the previous two years and similar to the average of 4.01 for the four-year college transfer group.

At the end of this first semester, the grade-point average of the junior college group had dropped noticeably from their pre-transfer grade-point average (3.99 to 3.57). This drop (-.42) is similar to the decline for the fall 1969 and fall 1970 junior college groups which experienced first semester GPA decreases of -.39 and -.37 respectively. Although an analysis of the factors influencing this drop is not readily available, it is clear that junior college transfer students consistently suffer this initial drop in mean G.P.A. or experience a "transfer shock." This "transfer shock" is illustrated in Figure 1.

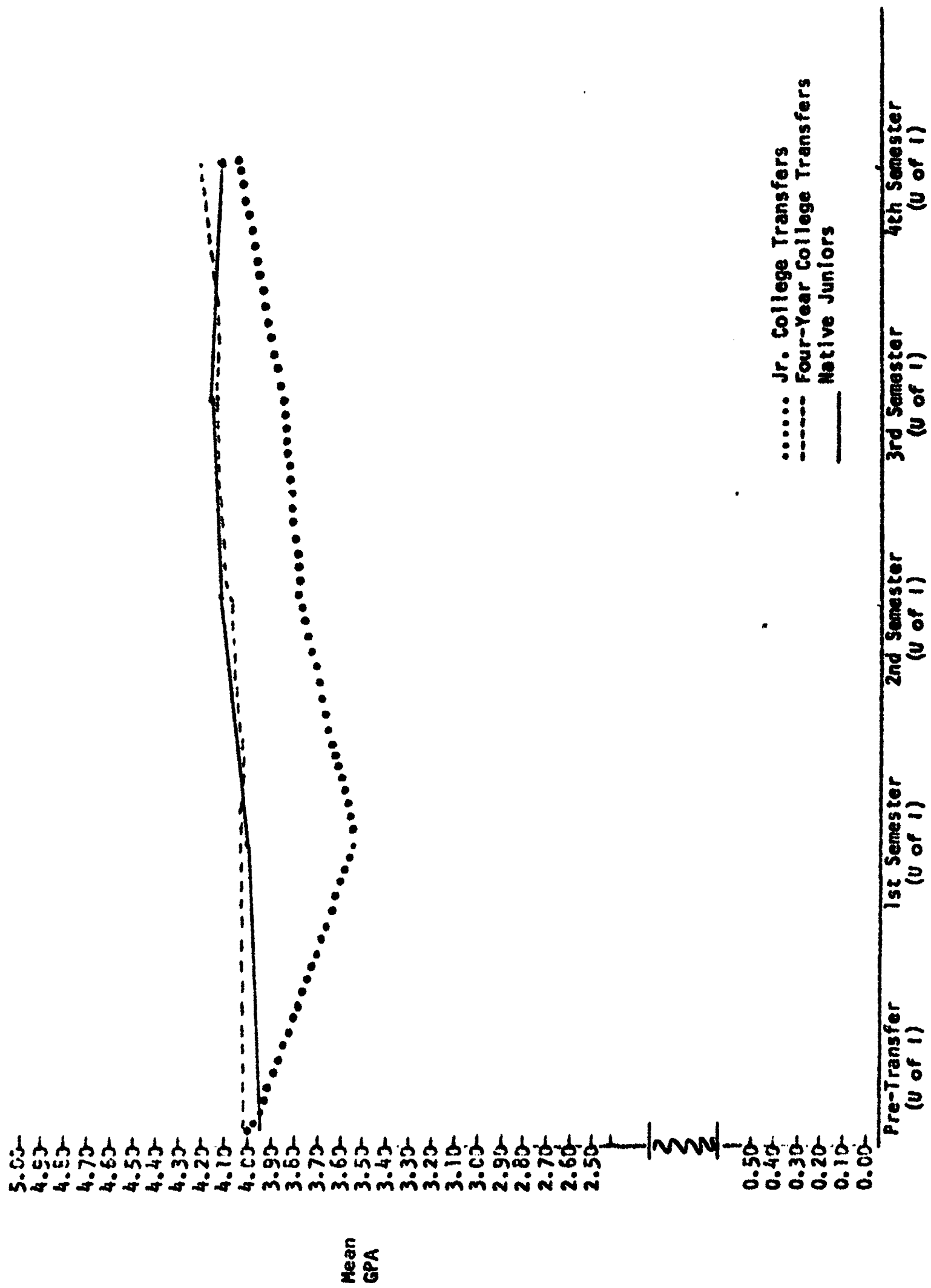


Figure 1
Transfer and Native Grade Point Average by Semester

At the end of the first term, the native juniors had the highest proportion of students on clear or graduated status (92 percent) followed by the four-year college transfers (88 percent), with the junior college group having the lowest proportion (75 percent) in these two categories. The junior college group had the highest percentage of students on probation (19 percent) while only seven percent of the four-year college group and five percent of the native juniors were on probation at the end of the first term. The percentages of students on clear status for all three groups were slightly higher and the percentages of students on probation were slightly lower than reported in the first semester for the fall 1970 groups.⁴ Although a very small percentage of all groups was dropped for academic reasons, the junior college group shows the highest proportion of these students (3 percent) with both the four-year college group and the native juniors having one percent. Four percent of the four-year college group, three percent of the junior college group and two percent of the native group officially withdrew during the semester. At the end of the 1971 fall semester, 94 percent of the junior college transfers, 95 percent of the four-year college transfers, and 97 percent of the continuous juniors were on clear or probationary status and eligible to re-enroll for the second semester. (See Figure 2). These retention ratios are similar to the ratios reported at the end of the first semester for the 1970 groups.⁵

These data demonstrate that even though the junior college transfers achieved a .44 lower first term mean grade-point average than the four-year college

⁴Anderson, op.cit., January, 1972.

⁵Anderson, op.cit., January, 1972.

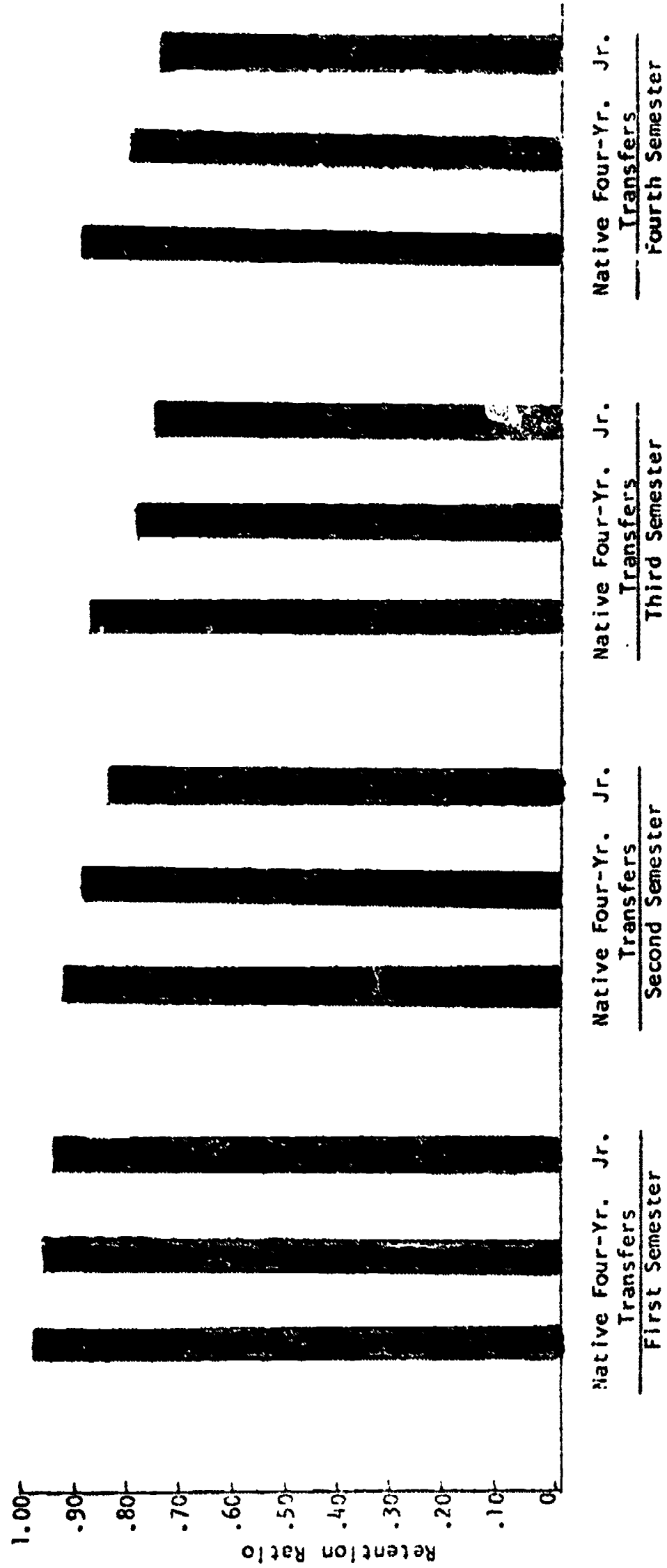


Figure 2
Transfer and Native Student Retention by Semester

group, they were as persistent during the first semester as the four-year college group when evaluated in terms of the total proportion of students who re-enrolled on clear or probationary status for the second semester. Ninety percent of the original populations of both junior college and four-year college groups re-enrolled for the second semester while 95 percent of the natives re-enrolled.

Second Semester Progress

The mean GPA and academic status of junior college transfers, four-year college transfers and native juniors who returned for the spring semester are shown in Table 1. Students in all three groups who re-enrolled for the second semester had achieved pre-transfer or lower division grade-point averages slightly higher than the pre-transfer grade-point averages achieved for all the students in their groups at the beginning of the fall semester. The mean transfer G.P.A.'s for the students who re-enrolled was calculated for each group and was slightly higher (.01 to .05) than the means for the original 1971 fall groups, but not considered to be significantly different from the original populations.

The differences between the pre-transfer or lower division (for natives) grade-point average and the second semester grade-point average for the groups was $-.27$ for the junior college transfers, $+.05$ for the four-year college transfers, and $+.11$ for the native juniors. This pattern of differences is similar to that found in previous studies.^{6,7} In comparing the first and second term mean G.P.A.'s, the junior college group increased the mean second term G.P.A. by $.19$, the four-year

⁶Anderson, op.cit., December, 1970.

⁷Anderson, op.cit., January, 1972.

group by .07 and the native juniors increased .11. There is no evidence that the increase can be accounted for by the hypotheses that those students returning for the second semester were higher achievers before transfer than the total group present for the fall, because the very slight difference in mean transfer G.P.A. (.01 to .05) is not sufficient to explain it. Another possibility is that the junior college transfers recovered from the "transfer shock" which they experience the first semester after transfer, but the natives increased their mean G.P.A. more than the four-year college group. These data demonstrate that even though the junior college group recovered some of the drop in mean G.P.A. during the second semester, they did not achieve a mean second semester G.P.A. equivalent to their pre-transfer G.P.A., nor did they perform academically during the first year after transfer at a level equivalent to the four-year college transfers or native juniors. However, the junior college group did recover about one-half of the first semester drop in G.P.A. to achieve a G.P.A. of 3.76 during the second semester.

Some of the "recovery" in the junior college group G.P.A. may be accounted for by the 41 students who were dropped or left on clear or probationary status at the end of the first semester or officially withdrew during the second semester. Analysis of the first semester performance of these 41 students (not reported in this study) shows that they achieved a G.P.A. of approximately .80 below the average of 3.57 for the total group. A similar analysis (not reported) for the four-year college students who did not return or withdrew during the second semester achieved a mean G.P.A. approximately .24 below the average for the total four-year group. These analyses point to the hypotheses that much of the "transfer shock," first

semester drop in G.P.A., followed by a sharp recovery during the second semester by the junior college group may be explained by the absence of the "leavers" (approximately 10 percent) who were low achievers during the first semester.

The three groups also differed in academic status and retention rates at the end of two semesters. (See Figure 2). The natives (91 percent), the four-year college group (85 percent), and the junior college group (82 percent) rank in descending order in the proportion of the re-enrolled groups which were continued on clear status at the end of the second semester. The junior college group had 11 percent on probation while the four-year college group had 5 percent and the natives 3 percent on probation. A total of 7 percent of the junior college, 4 percent of the four-year transfers, and 2 percent of the natives were dropped or withdrew during the second semester. These actions, combined with first semester retention, resulted in a retention ratio of .83 for the junior college group, .88 for the four-year college group, and .92 for the natives.

The substantially lower grade-point averages of the junior college students are the basis for more persons on probation, dropped, and withdrawn in comparison with the other two groups, resulting in a lower retention ratio for the junior college group when compared with the four-year colleges. The study does not include data which explain the lower retention ratio of the four-year college group in comparison with the natives even though the four-year college group achieved a mean G.P.A. approximately equal to the G.P.A. achieved by the native group, i.e., 4.08 vs. 4.10. Greater variance in individual G.P.A.'s among the four-year college group would allow for more students to be on probation and

drop status even though the mean G.P.A.'s of the two groups are similar. Part of the lower retention rate by the four-year college group can be accounted for by 11 percent who "left on clear" status and did not return. Even though this number is not available for the natives, it cannot be greater than the number of natives unaccounted for (2 percent) in the end of fourth semester summary (see Table 1, Column 4).

Third Semester Progress

Data for those students who re-enrolled for the fall, 1972 semester are shown in Table 1 (continued). The third semester grade-point averages for all three groups continued to increase over the second semester grade-point averages. The difference between the pre-transfer or lower division grade-point average and the mean third term grade-point average was $-.17$ for the junior college transfers, $+.07$ for the four-year college group, and $+.15$ for the continuous juniors. The junior college transfers achieved an increase of $.09$ for the third term when increases of $.08$ for the continuous juniors and $.04$ for the four-year college transfers were recorded. More than three-fourths of the three groups were retained at the end of three semesters with the natives at $.87$ followed by the four-year college group at $.79$ and the junior college group at $.75$. These data are presented in Table 1 (continued) and illustrated in Figure 2.

Academic Progress and Status Two Years After Transfer

This study clearly demonstrates that junior college transfers experience a substantial drop in G.P.A. during their first semester after transfer, but

during the fourth semester after transfer they recover from the "transfer shock" and achieve at a level equal to their pre-transfer G.P.A. Figure 1 clearly illustrates this recovery in G.P.A. by the junior college group; Figure 1 also illustrates that all three groups begin with approximately equivalent G.P.A.'s and the four-year college transfers and natives continue to achieve at the same or at a slightly higher achievement level than was attained during the pre-transfer or lower division for natives college work.

Four semesters after transfer, the 345 junior college transfer students enrolled had achieved a mean grade-point average of 4.03, .18 greater than that group's mean third term grade-point average and equal to that group's pre-transfer grade point average. Forty-five percent of the original junior college group had graduated; 27 percent and 2 percent were continuing on clear and probationary status respectively. Of the students in the original group who had not continued at the University, 7 percent had been dropped, 8 percent withdrew (during a semester), 7 percent left on clear status, and 4 percent left on probationary status. A total of 337 of the original fall 1971 junior college group were graduated or completed the spring 1973 term on clear or probationary status, resulting in a retention ratio of .74 for the group.

The four-year college group consisted of 469 students enrolled for the fourth semester. This group achieved a mean semester grade-point average of 4.19, .15 higher than their pre-transfer G.P.A. and .07 above their mean third semester G.P.A. Of the original four-year college group (679 students, 58 percent had

graduated, 22 percent were on clear status, and 1 percent on probationary status at the end of the fourth semester. Subtracting out the students who were dropped (2 percent), withdrew (5 percent), left on clear status (11 percent), or left on probationary status (1 percent), the retention ratio for this group is .80.

The native juniors who re-enrolled for the fourth semester (3222) achieved a mean semester G.P.A. of 4.18, .14 above the group's lower division G.P.A. and equal to their mean third semester G.P.A. At the end of the fourth semester, 78 percent of the native juniors had graduated, 10 percent were continuing on clear status and 1 percent was on probationary status. Four percent of the original group had been dropped and 5 percent withdrew. Data on the status (clear or probationary) of native juniors who chose to leave between semesters were not available.

After four semesters, 78 percent* of the native juniors, 58 percent of the four-year college transfers, and 45 percent of the junior college transfers had been granted degrees. Conversely, 27 percent of the junior college group, 22 percent of the four-year college group, and 10 percent of the native juniors were on clear status. It would seem that although the four-year college transfers were performing as well academically (in terms of mean fourth semester G.P.A.) as the native juniors, they had not graduated at as high a rate, possibly because of the fact that 17 percent of this group did not enter the university with junior status.⁸ In the case of junior college transfers, several factors, including

*A few students who have graduated in a previous term and enrolled are counted more than once in this category.

⁸Ernest F. Anderson, "Characteristics of Transfer Students to the University of Illinois at Urbana-Champaign, Fall, 1971," University Office of School and College Relations, University of Illinois at Urbana-Champaign, Research Memorandum 72-6, p. 6.

the greater proportion (20 percent) of the group who entered with less than 60 semester hours of transfer credit plus the basic differences in academic characteristics of the population and lower academic performance, could explain the smaller percentage of graduates four semesters after transfer.

The percentages of students on probation after four semesters were roughly equivalent (1 to 2 percent) for the three groups. Seven percent of the junior college transfers, 4 percent of the native juniors, and 2 percent of the four-year college transfers were dropped; 3 percent of the junior college group, and 5 percent of each the four-year college group and the native junior group withdrew in the course of four semesters. Eleven percent of the four-year college transfers and 7 percent of the junior college group left on clear status; 4 percent and 1 percent respectively of the junior and four-year college groups left on probationary status.

The retention ratio was highest for the native juniors (.89), followed by the four-year college transfer group (.80) and the junior college transfer group (.74). It may be assumed that by the junior year, a student who enrolled at the University of Illinois at Urbana-Champaign as a beginning freshman and continued for two years would be more likely to continue for two more years than a transfer student who is new to the environment and may have only one semester of college credit. The transfer group from four-year institutions achieved at a level equal to the natives, but had a retention ratio about 9 percent lower than the natives. The junior college group had a retention ratio 6 percent lower than the four-year college transfers and 15 percent below the native group. (See Figure 2).

Comparison by Subject Area

Data on transfer and native student grade-point averages achieved at the University of Illinois in each of 12 subject areas for the 1971 and 1972 academic years are presented in Table 2.

Rank ordering the three groups by subject-area grade-point average shows that the junior college transfers achieved a lower mean grade-point average in 11 of the 12 areas than either the four-year college transfers or native juniors during the first semester. Only in the field of education did the junior college group achieve a higher grade-point average than the other two groups. The native juniors achieved the highest grade-point average in four of the subject areas: biological science, physical science, engineering and home economics; the four-year college transfers ranked highest in seven areas: business and commerce, English, foreign languages, mathematics, social sciences, agriculture, and art and architecture. Differences between these two groups in some subject areas are small, and almost all of the averages are above 4.00.

Similar analyses for the second and third semesters show that the junior college transfers received the lowest mean grade-point averages in the 12 areas studied. The native junior group achieved the highest grade-point average in 6 of 12 subject areas in the second semester and 7 subject areas the third semester. The four-year college transfers ranked first in 6 subject areas after the second semester (equal to the natives) and 5 out of 12 areas after the third semester.

In the fourth semester, the junior college transfers achieved the highest grade-point average in art and architecture, continuing to rank third in all other

TABLE 2
Comparison of Transfer and Native Student
Academic Achievement by Subject Area
University of Illinois at Urbana-Champaign
Fall 1971 Group

Subject Area (1)	Junior College Transfers		Four-Year College Transfers		Continuous Juniors (Natives)	
	Mean		Mean		Mean	
	GPA (2)	Rank (3)	GPA (4)	Rank (5)	GPA (6)	Rank (7)
First Semester (Fall '71)						
Biological Science	3.66	(3)	4.01	(2)	4.07	(1)
Business & Commerce	3.34	(3)	3.92	(1)	3.85	(2)
English	3.86	(3)	4.34	(1)	4.08	(2)
Foreign Languages	3.73	(3)	4.25	(1)	4.04	(2)
Mathematics	2.94	(3)	3.70	(1)	3.68	(2)
Physical Sciences	3.19	(3)	3.62	(2)	3.85	(1)
Social Sciences	3.78	(3)	4.13	(1)	4.01	(2)
Agriculture	3.57	(3)	4.07	(1)	4.04	(2)
Engineering	3.73	(3)	3.90	(2)	3.99	(1)
Art & Architecture	3.72	(3)	4.14	(1)	4.13	(2)
Education	4.57	(1)	4.42	(3)	4.47	(2)
Home Economics	3.65	(3)	4.00	(2)	4.03	(1)
All Courses	3.57	(3)	4.01	(1)	3.99	(2)
Second Semester (Spring '72)						
Biological Science	3.61	(3)	4.07	(1)	4.06	(2)
Business & Commerce	3.64	(3)	3.98	(1)	3.89	(2)
English	4.08	(3)	4.29	(1)	4.23	(2)
Foreign Languages	3.75	(3)	4.15	(2)	4.21	(1)
Mathematics	3.14	(3)	3.54	(2)	3.78	(1)
Physical Sciences	3.54	(3)	3.75	(2)	3.93	(1)
Social Sciences	3.88	(3)	4.21	(1)	4.11	(2)
Agriculture	3.79	(3)	4.21	(1)	4.13	(2)
Engineering	3.78	(3)	3.85	(2)	4.17	(1)
Art & Architecture	3.91	(3)	4.37	(1)	4.21	(2)
Education	4.40	(3)	4.42	(2)	4.57	(1)
Home Economics	3.80	(3)	3.95	(2)	4.04	(1)
All Courses	3.76	(3)	4.08	(2)	4.10	(1)

TABLE 2 (Continued)

Comparison of Transfer and Native Student
Academic Achievement by Subject Area
University of Illinois at Urbana-Champaign
Fall 1971 Group

Subject Area (1)	Junior College Transfers		Four-Year College Transfers		Continuous Juniors (Natives)	
	Mean GPA (2)	Rank (3)	Mean GPA (4)	Rank (5)	Mean GPA (6)	Rank (7)
Third Semester (Fall '72)						
Biological Science	3.75	(3)	4.19	(1)	4.13	(2)
Business & Commerce	3.65	(3)	4.02	(2)	4.03	(1)
English	4.08	(3)	4.25	(1)	4.21	(2)
Foreign Languages	3.89	(3)	4.22	(1)	4.17	(2)
Mathematics	3.17	(3)	3.58	(2)	3.80	(1)
Physical Sciences	3.27	(3)	3.87	(2)	4.00	(1)
Social Sciences	3.95	(3)	4.18	(1)	4.15	(2)
Agriculture	3.79	(3)	4.02	(2)	4.16	(1)
Engineering	3.77	(3)	4.03	(2)	4.17	(1)
Art & Architecture	3.75	(3)	4.14	(1)	4.12	(2)
Education	4.57	(3)	4.72	(2)	4.73	(1)
Home Economics	4.07	(3)	4.13	(2)	4.22	(1)
All Courses	3.85	(3)	4.12	(2)	4.18	(1)
Fourth Semester (Spring '73)						
Biological Sciences	3.80	(3)	4.21	(1)	4.15	(2)
Business & Commerce	3.82	(3)	4.08	(1)	3.99	(2)
English	4.09	(3)	4.32	(1)	4.16	(2)
Foreign Languages	3.82	(3)	4.34	(1)	4.17	(2)
Mathematics	3.57	(3)	3.92	(1)	3.76	(2)
Physical Sciences	3.62	(3)	3.95	(2)	4.06	(1)
Social Sciences	4.00	(3)	4.17	(1)	4.08	(2)
Agriculture	3.96	(3)	4.23	(2)	4.25	(1)
Engineering	4.01	(3)	4.05	(2)	4.19	(1)
Art & Architecture	4.30	(1)	4.11	(3)	4.25	(2)
Education	4.64	(3)	4.68	(1)	4.65	(2)
Home Economics	4.10	(3)	4.18	(2)	4.23	(1)
All Courses	4.03	(3)	4.19	(1)	4.18	(2)

subject areas. The four-year college transfers achieved the highest grade-point averages in 7 of the 12 areas: biological sciences, business and commerce, English, foreign languages, mathematics, social sciences, and education. The native group ranked first in the remaining four areas: physical sciences, agriculture, engineering, and home economics.

These data show that the overall academic achievement (G.P.A.) of natives and four-year college transfers is equivalent while junior college transfers achieve at a slightly lower level. The four-year college group consistently (four semesters) ranked first in English, while in physical sciences the natives consistently ranked first. In none of the 10 other subject areas did either the four-year or natives consistently rank first in semester achievement.

Institutional Differences

The numbers of transfers, grade-point averages, final academic status and retention ratios for each of the Illinois junior colleges which sent five or more transfer students to the University of Illinois at Urbana-Champaign for the 1971 fall semester are presented in Appendix A. The "College Code" in Column 1 is randomly assigned for the purpose of assuring anonymity of institutional data.

The number of students who initially entered for the fall 1971 semester, the group's mean pre-transfer grade-point average (based on all courses attempted at all previous institutions), and the mean first semester grade-point average are presented in Columns 2, 3, and 4 respectively. Columns 5 through 10 show the number of students who re-enrolled and the grade-point average they achieved

over the next three semesters. Comparison of first and second term grade-point averages by institution shows that 25 of the 26 college groups achieved a mean second term grade-point average higher than their mean first term G.P.A. Comparison of pre-transfer and fourth semester G.P.A.'s shows that 17 of 26 college groups achieved a fourth semester mean grade-point average higher than their mean pre-transfer G.P.A.'s (for the original entering groups), the remaining nine college groups did not recover to the level of the mean pre-transfer G.P.A. for the 1971 fall transfers from that college.

It is clear from these data that even though recovery in grade-point average is noted in the second, third, and fourth semesters, considerable variance still exists in the achievement after transfer among groups from different junior colleges. There is no evidence presented in this study which explains the source of observed institutional differences or differences which may exist between students who enter the various curricula. However, previous studies of transfer students from junior colleges demonstrate the variance in the academic abilities of the students transferring from individual junior colleges and this may account for some of the differences. This study does not control for those differences nor present data which show that they actually exist for these groups.

The retention rates for each of the junior colleges with five or more transfers are presented in Column 25 of Appendix A. Eleven of the 25 individual institutions show retention rates of .80 or above after four semesters. Only five colleges have retention rates less than .66 or two-thirds of their transfers retained or graduated. Only two colleges have retention rates of .50 or less.

Three colleges seem to have a disproportionately high percentage of students dropped as shown in Column 18. A total of six, or 40 percent, of the transfers from college no. 18 were dropped. Only two other colleges, no. 04 and no. 05, have drop rates above 20 percent.

These data demonstrate that the academic achievement and retention rates for Illinois junior colleges with five or more transfers are quite satisfactory. Twenty of the 25 Illinois institutions have retention rates of .66 or higher, and 11 of the colleges have retention rates equal to or higher than the .80 found for all four-year college transfers.

Discussion and Interpretation

The findings of this study can be interpreted as "good news" or "bad news," depending upon the vantage point from which one views these data. To the community college reader, the study demonstrates that junior college transfers perform at the university, after adjusting to "transfer shock," at the same level as those same students performed before transfer. It also demonstrates that three-fourths of the junior college transfers are successful after transfer as measured by graduation or continuation rates at the major state university. The junior college transfer students achieve, on the average, at the "B" level during their fourth semester at the university, slightly below the native achievement. Since these students, as a group, entered college with lower high school achievement and lower scores on standardized entrance examinations, some junior college proponents might view the results of this study as conclusive evidence of the success of those institutions in preparing baccalaureate-oriented students for successful performance at a university.

The university or four-year college oriented reader who views the university's purpose to educate the best qualified youth for leadership roles in the technical and professional occupations may conclude from these data that preference should be given to transfer students from four-year colleges and universities over transfers from junior colleges or that transfers from some institutions should receive preference over transfers from those institutions with less than average success records. They could point to the higher mean G.P.A.'s and higher retention ratios by four-year colleges over junior colleges and some junior colleges over others. However, inspection of the individual student data demonstrates that the "best qualified" students who are successful at the university come from both junior colleges and four-year colleges. Therefore the basis for selection should be the quality of the individual student rather than the institution or the type or level of institution previously attended by the transfer student.

The researcher, a community college proponent fully institutionalized into a major research-oriented land-grant university, evaluates these data both positively and negatively. Ideally, junior college transfers with equivalent pre-transfer G.P.A.'s would perform after transfer at the same level as they did at the junior college and equivalent to the four-year college transfers and natives with equivalent academic achievement. Hopefully, they would achieve in the university and graduate in proportions equal to equivalent groups who attended other institutions. However, that was not found to be true for this group of junior or four-year college transfers. We need to find out why it is not true and attempt to set up experimental programs to discover if it is possible to achieve the ideal, and if not, why not.

Positively, junior college transfers perform very satisfactorily as a group when compared with beginning freshmen. Only 34 (7 percent) of the junior college transfers were dropped for academic reasons during the four semesters covered by this study and another 16 (4 percent) left while on probation. This means that only about one out of ten of these junior college transfers left the university because of clear academic difficulty. This is a good record for students who come predominantly from the second and third quartiles of their high school graduating class. These students achieved at about a "C+" (3.57) level immediately after transfer and at the "B" level during the fourth semester. This is an achievement record which junior college transfers, their previous institutions, and the university can point to with a sense of accomplishment.

The data presented in this study demonstrate that the Illinois system of "universal access" to higher education is providing opportunities for many persons to begin their baccalaureate programs in "open door" community and junior colleges and transfer to the more selective universities and successfully perform in competition with natives.

Summary of Findings

The data presented in this study result in the following conclusions:

1. Junior college transfers and four-year college transfers enter with pre-transfer grade-point averages approximately equivalent to the lower division university grade-point averages of native juniors.
2. Junior college transfers experience a first semester drop of about .40 in G.P.A. below their pre-transfer G.P.A. and the four-year college transfers and natives; however, this loss in G.P.A. is regained by the end of the fourth semester.

3. Retention of junior college and four-year college transfer groups is approximately equal for the first semester at .94 and .95 respectively.
4. Junior college transfers experience more academic difficulty after transfer than four-year college transfers or natives as measured by probation and drop rates.
5. The junior college transfer group performed at the "B" level during the fourth semester at the university which is equivalent to the pre-transfer G.P.A. for that group.
6. Native juniors and four-year college transfers achieve equivalent group grade-point averages.
7. Native juniors have higher retention rates than four-year college transfers or junior college transfers. Approximately 90 percent of the natives, 80 percent of the four-year college transfers and 75 percent of the junior college transfers have graduated, or continue on clear or probation at the end of four semesters.
8. Transfer students have higher academic probation and drop rates than native juniors; junior college transfers have higher probation and drop rates than four-year college transfers.
9. Junior college transfers consistently achieve at a lower G.P.A. than four-year college transfers and natives in the 12 subject areas studied. Natives and four-year transfers perform about equally in the same subject areas.

Further Interpretation

The findings and conclusions presented in this study need to be interpreted in the context of the environment in which the research was conducted and evaluated and in relation to the differential purposes of the types of institutions represented

by students in the study. One purpose of community colleges is to prepare baccalaureate-oriented students for successful transfer to four-year colleges and universities for completion of bachelor's degrees. Community colleges are "open door" institutions obligated to admit all students who are minimally qualified to complete one of their programs. This means that community colleges have students enrolled in baccalaureate-oriented courses and programs who are high academic achievers with a high probability for success in a bachelor's degree program as well as students with average and below average academic achievement with lower probability of achieving success in a transfer program. It is from this population of community college students that the transfers to the University of Illinois select themselves to apply for transfer.

The major purpose of the undergraduate colleges at the University of Illinois is to provide the general education, technical and professional knowledge and skills to fill leadership roles in society at the bachelor's degree level and to prepare students for successful completion of graduate programs. The University of Illinois at Urbana-Champaign admits the "best qualified" beginning freshmen and transfers in each of its colleges and curricula for each admission period. Data for the present and recent beginning freshmen classes show that the average beginning freshman student graduated at about the 85th percentile of his or her high school graduating class and had an ACT composite score of about 26, which makes the native student population a very highly qualified group when compared with the population of junior college students enrolled in baccalaureate-oriented programs.

The four-year colleges and universities from which the University receives transfer students have divergent purposes, but it is known that the transfers from those institutions to the University of Illinois have high school ranks and college entrance achievement scores very similar to the scores of native students.

This knowledge about the purposes of the institutions and academic characteristics of the three groups of students included in this study provide a basis for the following interpretations of the findings.

The junior colleges provide an opportunity for many students to enter the University's undergraduate programs as transfer students who would not have been admitted under the more competitive beginning freshmen requirements. Three-fourths of these students are successful at the university as measured by retention for four semesters after transfer. The "success rate" is about six percent less than transfers from four-year colleges and about 15 percent less than for native juniors.

The finding that native and four-year college transfer students achieve higher G.P.A.'s than community college transfers is assumed by some to mean that those two groups are more qualified at graduation. The writer knows of no evidence which supports that conclusion when evaluated in relation to the purposes of the institution. Universities do not normally evaluate their graduates with 4.20 grade-point averages as superior to graduates with 4.00 G.P.A.'s. Therefore the writer finds no evidence that the difference in junior college and four-year college and native G.P.A.'s justifies a conclusion that native and four-year

college transfers are superior to junior college transfers. These data demonstrate that the higher education system is sufficiently open to permit students who enter the system at various types of colleges and perform successfully to be successful in attaining a bachelor's degree.

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Appendix A

Summary of Community College Transfer Student Progress by Institution of Last Attendance
University of Illinois at Urbana-Champaign
Fall, 1971 Group

Col- lege Code (1)	No. Fall Trans- fers (2)	Pre- Trans- GPA (3)	Mean 1st Sem. GPA (4)	No. Re-enrolled and GPA				Academic Status After Fourth Semester												Reten- tion Ratio (25)				
				2nd		3rd		4th		Clear		Dropped		With- drawn		Left on								
				No. (5)	GPA (6)	No. (7)	GPA (8)	No. (9)	GPA (10)	No. (11)	% (12)	No. (13)	% (14)	No. (15)	% (16)	No. (17)	% (18)	No. (19)	% (20)		No. (21)	% (22)	No. (23)	% (24)
01	7	4.11	3.58	6	4.03	6	3.92	6	4.36	3	43%	3	43%	0	0%	0	0%	0	0%	1	14%	0	0%	.86
02	29	3.98	3.66	24	3.90	21	3.59	21	3.86	14	48	6	21	1	3	3	11	3	11	3	11	1	3	.72
03	11	3.75	3.24	9	3.57	8	4.05	8	4.39	3	27	4	37	0	0	2	18	2	18	0	0	0	0	.64
04	14	4.02	3.10	14	3.16	11	3.61	10	3.93	4	29	5	36	1	7	3	21	0	0	0	0	1	7	.71
05	9	3.85	2.97	6	3.49	5	3.46	4	4.28	1	11	3	33	0	0	3	33	2	22	0	0	0	0	.33
06	36	4.08	4.04	34	4.11	32	3.98	31	4.07	21	58	7	19	1	3	4	11	2	6	0	0	0	0	.80
07	8	4.11	3.25	7	3.76	4	3.79	4	3.92	1	12	3	38	0	0	1	12	1	12	2	25	0	0	.50
08	10	4.00	3.98	9	4.08	8	4.17	8	4.39	7	70	1	10	0	0	0	0	2	20	0	0	0	0	.80
09	15	3.92	3.51	14	3.66	12	4.04	12	4.20	10	67	2	13	0	0	1	7	0	0	0	0	2	13	.80
10	19	4.05	3.62	17	4.01	17	3.97	17	4.07	11	58	5	27	0	0	1	5	1	5	0	0	1	5	.84
11	11	4.08	4.05	10	4.09	7	3.99	7	4.22	4	36	4	36	0	0	0	0	0	0	3	28	0	0	.73
12	6	4.26	3.50	6	4.20	5	3.60	4	4.27	4	67	0	0	0	0	0	0	0	0	2	33	0	0	.67
13	8	4.21	3.38	7	4.03	5	4.42	6	4.23	2	25	4	50	0	0	0	0	0	0	1	12	1	12	.75
14	13	3.96	3.66	13	3.84	12	4.06	12	4.16	8	61	3	23	0	0	1	8	1	8	0	0	0	0	.85
15	8	3.57	3.19	7	3.14	7	3.14	6	3.36	2	25	2	25	3	38	0	0	1	12	0	0	1	12	.75
16	8	3.62	3.57	6	3.93	5	3.95	4	4.16	4	50	1	12	0	0	1	12	0	0	2	25	0	0	.62
17	10	3.80	3.25	10	3.71	9	3.65	9	3.86	5	50	2	20	0	0	1	10	1	10	1	10	0	0	.70
18	15	3.99	3.29	14	3.42	12	3.54	11	3.86	8	53	1	7	0	0	0	0	0	0	0	0	0	0	.60
19	25	4.01	3.54	25	3.71	21	3.95	20	4.06	13	52	8	32	0	0	2	8	1	4	1	4	0	0	.84
20	82	4.03	3.65	70	3.77	64	3.80	60	4.02	25	31	28	34	2	2	7	9	8	10	6	7	6	7	.67
21	20	3.78	3.64	17	3.69	16	3.89	16	3.98	12	60	5	25	0	0	1	5	0	0	2	10	0	0	.85
22	7	3.71	3.60	7	3.70	7	3.49	6	4.06	3	43	4	57	0	0	0	0	0	0	0	0	0	0	1.00
23	11	3.87	2.97	10	3.19	9	3.37	8	3.68	6	55	3	27	0	0	2	18	0	0	0	0	0	0	.82
24	9	4.12	3.78	9	3.88	8	3.96	7	3.77	5	56	1	11	1	11	0	0	0	0	1	11	1	11	.78
25	7	4.10	3.60	6	3.88	5	4.36	5	4.29	1	14	4	57	0	0	0	0	0	0	0	0	2	29	.71
26	6	4.33	3.80	5	4.03	5	4.48	4	4.37	5	83	0	0	0	0	0	0	1	17	0	0	0	0	.83
99	6	4.07	3.10	4	3.59	4	4.42	4	4.20	1	17	3	50	0	0	1	17	0	0	1	17	0	0	.67
All JC	455	3.99	3.57	406	3.76	360	3.85	345	4.03	203	45%	125	27%	9	2%	34	7%	35	8%	33	7%	16	4%	.74
All 4-																								
Yr.Tr.	679	4.02	4.01	609	4.08	499	4.12	469	4.19	391	58%	148	22%	6	1%	17	2%	38	5%	74	11%	5	1%	.80
All Con.																								
Jrs.at																								
UC	4238	3.74	3.99	4012	4.10	3605	4.18	3222	4.18	3284	78%	438	10%	39	1%	171	4%	201	5%	N/A	N/A			.89